

# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-796 REV. F AND INSTRUCTIONS FOR  
CONTINUED AIRWORTHINESS ICA-D119-796 REV. 4 OR LATER APPROVED REVISION

REF. TCCA STC: SH14-45  
REF. FAA STC: SR03504NY  
REF. EASA STC: 10052022  
REF. DGCA INDIA LOA: 07-09/2011-AED  
REF. BRAZIL STC: 2015S07-16  
REF. PHILLIPPINES LOA: C-16-0221  
REF. CHINA VSTC: VSTC0757  
REF. RUSSIA TC: CT316-A119  
REF. INDONESIA STC: SR 025

## 1.0 PURPOSE

The purpose of this Dart Service Instruction (DSI) is to provide parts and instructions to convert the D119-796-021 standard landing gear assembly into a D119-796-031 float compatible landing gear assembly. This conversion is accomplished by replacing the D119-646-041 standard skidtubes with D119-646-043 float compatible skidtubes.

The components of the DSI 9799-011 kit provide the hardware required for this conversion.

## 2.0 PROCEDURE

**Note:** The following instructions require Qty (2) D119-646-043 Float Skidtubes in addition to the DSI 9799-011 kit.

- 2.1. Remove the D119-646-041 skidtubes (with saddles, ground handling lugs, and tow rings) per Section 32.1 of ICA-D119-646. Discard the bolts, washers, and nuts that secured the saddles to the crosstubes.
- 2.2. Remove the saddles from the skidtubes per Sections 32.3.1 thru 32.3.3 of ICA-D119-646. Retain the saddles and D2652 bushings. Discard the bolts, washers, and nuts.
- 2.3. Remove the ground handling lugs from the skidtubes per Section 32.4.1 of ICA-D119-646. Retain the D3886-041 lugs and D2652 bushings. Discard the bolts, washers, and nuts.
- 2.4. Remove the tow rings from the skidtubes per Section 32.6.1 of ICA-D119-646. Retain the D3407-041 tow rings. Discard the washers and nuts.
- 2.5. Install the saddles retained in step 2.2 on the D119-646-043 skidtubes per Sections 32.3.5 thru 32.3.6 of ICA-D119-646. Use hardware from the DSI 9799-011 kit and D2652 bushings retained in step 2.2.
- 2.6. Install the ground handling lugs retained in step 2.3 on the D119-646-043 skidtubes per Section 32.4.3 of ICA-D119-646. Use hardware from the DSI 9799-011 kit and D2652 bushings retained in step 2.3.
- 2.7. Install the tow rings retained in step 2.4 on the D119-646-043 skidtubes per Section 32.6.3 of ICA-D119-646. Use hardware from the DSI 9799-011 kit.
- 2.8. Install the D119-646-043 skidtubes (with saddles, ground handling lugs, and tow rings) per Section 32.2 of ICA-D119-646 using hardware from the DSI 9799-011 kit. Ensure the D5449-1 float saddles washers are installed on the inboard side of the saddles per DSI 9756.
- 2.9. Make an entry into the aircraft records that the D119-646-041 skidtubes have been replaced with D119-646-043 skidtubes using the DSI 9799-011 kit. Record that the D119-796-021 standard landing gear assembly has been converted to a D119-796-031 float compatible landing gear assembly. Adjust weight and balance for the aircraft based on the data in Section 4.0 of this document.

CANADA  
DEPARTMENT OF TRANSPORT  
AIRCRAFT CERTIFICATION  
BRANCH  
DAO # 01-O-01

### APPROVED

BY:   
C. PROVENCAL (DE # 03)

DATE: 18.03.19  
CERT. NO.: SH14-45  
ISSUE NO.: 1

APPROVED

A	NEW ISSUE	ZF	18.03.19
REV.	DESCRIPTION		DATE
DESIGN	ZF	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	ZF		
CHECKED	NO	DRAWING NO.	REV. A
MFG. APPR.	N/A	<b>DSI 9799</b>	SHEET 1 OF 2
APPROVED	NO	TITLE	SCALE
DE APPR.	CP 	<b>LANDING GEAR CONVERSION KIT</b>	NTS
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### 3.0 PARTS LIST

The DSI 9799-011 Landing Gear Conversion Kit contains the following items.

QTY -011	P/N	DESCRIPTION
X	DSI 9799-011	LANDING GEAR CONVERSION KIT
4	D3417-5	WASHER
2	D3456-1	WASHER
48	D3672-3	PHENOLIC WASHER
40	D3672-7	PHENOLIC WASHER
4	D5449-1	FLOAT SADDLE WASHER
8	AN3C46A	BOLT
16	AN3C50A	BOLT
24	AN4C6A	BOLT
24	MS21043-3	NUT, SELF-LOCKING
26	MS21043-4	NUT, SELF-LOCKING
8	MS21043-5	NUT, SELF-LOCKING
8	MS21250-05048	BOLT
24	NAS1149C0332R	WASHER
48	NAS1149C0432R	WASHER
8	NAS1149C0532R	WASHER

### 4.0 WEIGHT AND BALANCE

A DSI 9799-011 Landing Gear Conversion Kit is used to convert a D119-796-021 standard landing gear assembly to a D119-796-031 float compatible landing gear assembly. The effect on weight and balance of each kit is listed in IIN-D119-796, and is provided in the table below as reference.

DART P/N	Weight	STA	Moment
D119-796-021	122.7 lb 55.7 kg	122.2 in 3104 mm	14,994 in-lb 172.9 m-kg
D119-796-031	135.5 lb 61.5 kg	134.8 in 3424 mm	18,265 in-lb 210.6 m-kg

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